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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,891	10/28/2003	Shinya Matsumoto	14470.0017US01	7786

7590 09/20/2005

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EXAMINER

LUM VANNUCCI, LEE SIN YEE

ART UNIT	PAPER NUMBER
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3611

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,891

Applicant(s)

MATSUMOTO ET AL.

Examiner

Lee Lum

Art Unit

3611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-8 and 11-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,3,5-8,11-17,20 and 21 is/are rejected.
7) ☒ Claim(s) 18 and 19 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. An Amendment was filed 7/25/05 in which Claims 2, 4, 9 and 10 were also cancelled, and Claims 17-21 added.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. Claims 1, 3, 6-8, 11-17, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable by Ellsworth et al 6595538 in view of Lenoble 5976052.

Ellsworth discloses a bicycle comprising

Frame (unidentified) including pivot section (adjacent pivot shaft C in fig 1A),

The pivot section being located within

the gear-shifting (first) chain (unidentified, inherent in c8, ln 32-34, 54-59),

and output (second) chain (unidentified; inherent in figs 4),

when viewed from the side (figs 1A and 4), and,

comprises a single member passing through the transmission

(unidentified element passing through axis C in fig 1A),

Rear end of a swing arm structure includes dual arms 8 connected to rear wheel 30,

Transmission including

drive rotation body/sprocket, and crankshaft (both unidentified, inherent),

plurality of gears, gear shift mechanism including gear shift chain (all in c8, ln 54-59),

output shaft (unidentified, adjacent element 5, inherent in gear-change mechanism in c8, ln 54-59), and,

output chain (unidentified, inherent as between rear wheel and crankshaft),
Wherein

The swing arm structure swings about the pivot section.

The reference does not disclose a case enclosing the transmission, and gears, while Lenoble shows this feature 28. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this configuration, as shown in Lenoble, to protect the transmission from damage from environmental factors, thus increase proper operation and longevity. Cases/covers for this type of mechanism (and similar types) are obvious and well-known for this reason.

B. Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellsworth in view of Lenoble, and in further view of Kadaja 5346234.

The previous references do not disclose a transmission case made of resin, while Kadaja shows this element 36 in c2, ln 42-44. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this feature, as shown in Kadaja, to protect the transmission from the elements and environment, thus maximize proper operation and increase longevity of the mechanism. This material is known to be durable and lightweight.

3. **Claims 18 and 19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art does not disclose the bicycle described above further comprising, *inter alia*, the output shaft as spaced forward from the crankshaft.

4. The prior art found pertinent to the disclosure, but not relied upon, includes:
Lawwill et al 6102421, Harris 5452910.

5. RESPONSE TO REMARKS

Examiner has modified previous rejections to reflect amendments, employing Ellsworth in view of Lenoble, for respective claims.

Ellsworth discloses the majority of the recited elements, including *two chains*: an output (first) chain as inherent between an output shaft and the rear wheel, and a gear-change (second) chain, as well-known within a gear-change mechanism, between a selected gear and an output sprocket/shaft.

Lenoble is combined to teach a transmission case, this feature being well-known, and frankly, noncrucial to the proper operation of the bicycle transmission. Applicant appears to be rendering a piecemeal analysis with this reference, when the intent is clearly to teach a case, or cover, for the transmission. Further, Applicant's attempted nuance with respect to "supported by the case" versus "enclosed by the case" is unclear because the former is not a limitation, while the case clearly discloses the latter, and is "attached to the frame".

Lastly, with respect to Kadaja, again, Applicant is considering this teaching reference separately from the intended combination with Ellsworth and Lenoble. This reference shows the case made of resin, and not any other limitation. See *In re Keller*, 208 USPQ 871 (CCPA 1981).

Applicant is asked to note allowable subject matter.

6. Amendments have necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

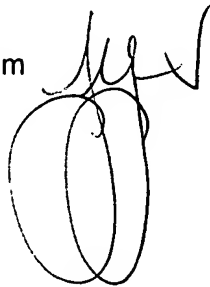
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


7. Communication with USPTO/Examiner

Any inquiry concerning this communication, or others, should be directed to Ms. Lum at 571 272-6649, M-F, 9-5. If attempts to reach the examiner are unsuccessful, her supervisor, Ms. Lesley Morris is at 571 272-6651. Our fax number is 571 273 8300.

Our fax number is 703 872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications: private PAIR only, for published applications: private or public PAIR. For more information re PAIR: <http://pair-direct.uspto.gov>. Questions re private PAIR: contact the Electronic Business Center (EBC) at 866 217-9197.

Ms. Lee S. Lum
Examiner
9/15/05




LESLEY D. MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600